

ABSTRACT OF THE INVENTION

A system and method for central association and tracking for PCL applications is disclosed. Detection reports are received at a target tracking processing system. The detection reports include measurements correlating to line tracks associated with target echoes in earlier processing operations. In
5 addition, other information, such as parameters and observables, are received by the target track processing system. The target track processing system performs a line track association function and a track filtering function on the line tracks according to the measurements within the detection reports. These operations also predict and estimate target parameters for tracking. Target
10 parameters are extrapolated from the propagated and updated target tracks, and fed to a display for a user, or back into the PCL system for further processing.